

Claims after this response:

1.(Currently Amended) A method for obtaining a client program grammar communication from an Application Programming Interface (API) call to an instrument, wherein the API call does not fully and unambiguously specify the client program grammar, the method comprising:

using a system controller to obtain the API call;

using the system controller to determine whether or not metadata is associated with the API call; and

when metadata is associated with the API call, using the system controller to obtain the associated metadata; and

to automatically determine a best estimation of the client program grammar communication from the associated metadata and from the API call; and

otherwise, using the system controller to automatically obtain a best estimation of the client program grammar communication from the API call wherein the API call does not fully and unambiguously specify the client program grammar.

2.(Original) The method as recited in Claim 1, wherein the API call is a .NET API call.

3. (Original) The method as recited in Claim 1, wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication.

4. (Original) The method as recited in Claim 3, further comprising:

evaluating the obtained best estimation of the SCPI communication for conformance of the best estimation of SCPI communication to SCPI specifications.

5. (Previously Presented) A method for obtaining a client program grammar communication from an Application Programming Interface (API) call to an instrument, comprising:

using a system controller to obtain the API call;

when metadata is associated with the API call,

to obtain the associated metadata; and

to automatically determine a best estimation of the client program grammar communication from the associated metadata and from the API call; and

otherwise, to automatically obtain a best estimation of the client program grammar communication from the API call;

wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication;

further comprising;

evaluating the obtained best estimation of the SCPI communication for conformance of the best estimation of SCPI communication to SCPI specifications; and

when the obtained best estimation of the SCPI communication does not conform to SCPI specifications, manually adjusting the obtained best estimation of the SCPI communication to conform to SCPI specifications.

6. (Currently Amended) ~~The method as recited in Claim 3,~~ A method for obtaining a client program grammar communication from an Application Programming Interface (API) call to an instrument, comprising:

using a system controller to obtain the API call;

when metadata is associated with the API call,
to obtain the associated metadata; and

to automatically determine a best estimation of the client program
grammar communication from the associated metadata and from the API call;
and

otherwise,

to automatically obtain a best estimation of the client program
grammar communication from the API call;

wherein the client program grammar communication is a Standard Commands for
Programmable Instrumentation (SCPI) communication;

further comprising:

evaluating the obtained best estimation of the SCPI communication for
conformance of the best estimation of the SCPI communication to General-Purpose
Interface Bus (GPIB) specifications.

7.(Previously Presented) A method for obtaining a client program grammar
communication from an Application Programming Interface (API) call to an instrument,
comprising:

using a system controller to obtain the API call;

when metadata is associated with the API call,
to obtain the associated metadata; and
to automatically determine a best estimation of the client program
grammar communication from the associated metadata and from the API call;
and

otherwise, to automatically obtain a best estimation of the client program grammar communication from the API call;

wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication;

further comprising:

evaluating the obtained best estimation of the SCPI communication for conformance of the best estimation of the SCPI communication to General-Purpose Interface Bus (GPIB) specifications; and

when the obtained best estimation of the SCPI communication does not conform to GPIB specifications, manually adjusting the obtained best estimation of the SCPI communication to conform to GPIB specifications.

8. (Currently Amended) A computer readable memory device embodying a computer program of instructions executable by a computer, the instructions comprising:

obtaining an Application Programming Interface (API) call, wherein the API call does not fully and unambiguously specify the client program grammar;

determining whether or not metadata is associated with the API call; and

when metadata is associated with the API call;

obtaining the associated metadata; and

automatically determining a best estimation of a client program grammar communication from the associated metadata and from the API call;
and

otherwise,

automatically obtaining a best estimation of the client program grammar communication from the API call.

9. (Original) The computer readable memory device as recited in Claim 8, wherein the API call is a .NET API call.

10. (Original) The computer readable memory device as recited in Claim 8, wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication.

11. (Original) The computer readable memory device as recited in Claim 10, the instructions further comprising:

evaluating the obtained best estimation of the SCPI communication for conformance of the best estimation of the SCPI communication to SCPI specifications.

12. (Previously Presented) A computer readable memory device embodying a computer program of instructions executable by a computer, the instructions comprising:

obtaining an Application Programming Interface (API) call;

when metadata is associated with the API call;

obtaining the associated metadata; and

automatically determining a best estimation of a client program grammar communication from the associated metadata and from the API call; and

otherwise,

automatically obtaining a best estimation of the client program grammar communication from the API call;

wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication;

the instructions further comprising:

evaluating the obtained best estimation of the SCPI communication for conformance of the best estimation of the SCPI communication to SCPI specifications; and

when the obtained best estimation of the SCPI communication does not conform to SCPI specifications, manually adjusting the obtained best estimation of the SCPI communication to conform to SCPI specifications.

13. (Currently Amended) ~~The computer readable memory device as recited in Claim 10;~~ A computer readable memory device embodying a computer program of instructions executable by a computer, the instructions comprising:

obtaining an Application Programming Interface (API) call;

when metadata is associated with the API call;

obtaining the associated metadata; and

automatically determining a best estimation of a client program grammar communication from the associated metadata and from the API call;
and

otherwise,

automatically obtaining a best estimation of the client program grammar communication from the API call;

wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication,

the instructions further comprising:

evaluating the obtained best estimation of the SCPI communication for conformance of the best estimation of the SCPI communication to General-Purpose Interface Bus (GPIB) specifications.

14. (Previously Presented) A computer readable memory device embodying a computer program of instructions executable by a computer, the instructions comprising:

obtaining an Application Programming Interface (API) call;

when metadata is associated with the API call;

obtaining the associated metadata; and

automatically determining a best estimation of a client program grammar communication from the associated metadata and from the API call; and

otherwise,

automatically obtaining a best estimation of the client program grammar communication from the API call;

wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication;

the instructions further comprising:

evaluating the obtained best estimation of the SCPI communication for conformance of the best estimation of the SCPI communication to General-Purpose Interface Bus (GPIB) specifications; and

when the obtained best estimations of the SCPI communication does not conform to GPIB specifications, manually adjusting the obtained best estimation of the SCPI communication to conform to GPIB specifications.

15. (Currently Amended) A data processing system, comprising:

a data processor having a generator module; wherein said generator module is:
configured to receive a client program grammar communication from
an Application Programming Interface (API) call wherein the API call does
not fully and unambiguously specify the client program grammar,
configured to determine whether or not metadata is associated with the
API call;
configured to obtain metadata when such metadata is associated with
the API call, and
configured to automatically determine a best estimation of the client
program grammar communication from the API call and, when such metadata
has been obtained, also from the associated metadata.

16. (Original) The system as recited in Claim 15, wherein the API call is a .NET API call.

17. (Original) The system as recited in Claim 15, wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication.

18. (Currently Amended) The system as recited in Claim 17, wherein the generator module is further configured to evaluate the obtained best estimation of the SCPI communication with regard to conformance of the best estimation of the SCPI communication to SCPI specifications.

19. (Currently Amended) ~~The system as recited in Claim 17,~~ A data processing system, comprising:

a data processor having a generator module; wherein said generator module is:
configured to receive a client program grammar communication from
an Application Programming Interface (API) call,
configured to obtain metadata when such metadata is associated with
the API call, and

configured to automatically determine a best estimation of the client program grammar communication from the API call and, when such metadata has been obtained, also from the associated metadata.

wherein the client program grammar communication is a Standard Commands for Programmable Instrumentation (SCPI) communication; and

wherein the generator module is further configured to evaluate the obtained best estimation of the SCPI communication with regard to conformance of the best estimation of the SCPI communication to General-Purpose Interface Bus (GPIB) specifications.

20. (Original) The system as recited in Claim 19, wherein GPIB specifications are specified by the Institute of Electrical and Electronic engineers (IEEE) specification number, IEEE 488.1.